



U.S. Department
of Transportation

Federal Highway
Administration

Memorandum

6300 Georgetown Pike
McLean, Virginia 22101

Subject: **ACTION:** LTPP Directive P-41
Upgrade of PROQUAL Software to
PROQUAL 2005 Version 5.0 Release 2 Build 2

Date: May 9, 2005

From: Larry Wiser *Larry J. Wiser*
Long Term Pavement Performance Team

Reply to
Attn of: HRDI-13

To: Dr. Frank Meyer, PM - LTPP North Atlantic Regional Contract
Dr. Frank Meyer, PM - LTPP North Central Regional Contract
Mr. Mark Gardner, PM - LTPP Southern Regional Contract
Mr. Kevin Senn, PM - LTPP Western Regional Contract

Attached is the Long Term Pavement Performance (LTPP) Program Monitoring Directive P-41: Upgrade of PROQUAL Software to PROQUAL 2005 Version 5.0 Release 2 Build 2. Effective immediately, the software shall be installed and used on all computers collecting or processing LTPP Profile data. Version 5.0 Release 2 Build 2 of PROQUAL 2005 with documentation was made available earlier for download and installation via the LTPP North Atlantic Regional Office (NARO) ftp site. The April 2005 Documentation is made up of 3 items: ProQual 2005 Overview # FHWA-TS-05-00-01; ProQual 2005 User Guide # FHWA-TS-05-00-02; ProQual 2004 Utilities Manual # FHWA-TS-05-00-03. Installation instructions are provided in the documentation.

Should you have any questions or would like to discuss this directive, please do not hesitate to contact me at 202-493-3079.

Attachments

LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE



For the Technical Direction of the LTPP Program



Program Area:	Monitoring	Directive Number:	P-41
Date:	May 9, 2004	Supersedes:	P-36
Subject:	Upgrade of PROQUAL Software to PROQUAL 2005 Version 5.0 Release 2 Build 2		

Version 5.0 Release 2 Build 2 of PROQUAL 2005 with documentation was made available earlier for download and installation via the LTPP North Atlantic Regional Office (NARO) ftp site. The documentation is installed with ProQual 2004 in a support sub-directory and is available in WORD and/or PDF formats. The April 2005 Documentation is made up of 3 items: ProQual 2005 Overview # FHWA-TS-05-00-01; ProQual 2005 User Guide # FHWA-TS-05-00-02; ProQual 2004 Utilities Manual # FHWA-TS-05-00-03.

The software possesses new features and upgrades. The key ones of which are as follows:

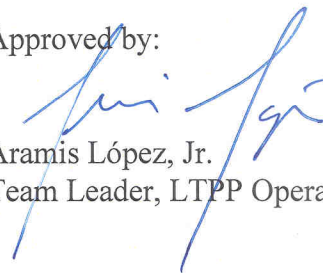
- User interface refinements.
- Bug fixes.
- Archiving capabilities.
- Unfiltered manual longitudinal profile data is now used for analysis and uploading to the IMS.
- Tools (e.g. TeeChart) embedded in the software were upgraded to the latest version.

Effective immediately, the software shall be installed and used on all computers collecting or processing LTPP Profile data. Installation instructions are provided in the documentation.

If there are any problems please submit a Profiler Problem Report (PROFPR) form in accordance with the guidelines contained in the latest version of the LTPP Manual for Profile Measurements.

Prepared by: NARO

Approved by:


Aramis López, Jr.
Team Leader, LTPP Operations



MEMORANDUM



Long-Term Pavement Performance

LTPP NORTH ATLANTIC REGIONAL OFFICE

150 Lawrence Bell Drive, Suite 108 - Amherst, New York 14221 - 7805

Tel: (716) 632-0804 - Fax: (716) 632-4808 - www.STANTEC.com/ltp

To: Robin Belt, Tyler Morrison, Suresh Venukanthan, Rohan Perera

From: Frank Meyer

Date: May 9, 2005

Reference: ProQual 2005 Version 5.0 Release 2 Build 2

FILE: 1621-50055-177

ProQual 2005 Version 5.0.2.2 is being distributed for final release.

Installation:

ProQual 2005 Version 5.0.2.2 should be installed separately from the current operational release. Do not overwrite your current version. They can co-exist on the same machine.

The following steps should be taken to install ProQual 2005 Version 5.0.2.2:

1. Download PROQUAL_2005_5022.ZIP (25.3 Mb) from the Stantec ftp site:

- Site Name: <ftp://ftp.stantec.com/>
- User Name: FTPvisitor
- Password: flowers

Note that files are removed from the Stantec ftp site after 48 hours. If PROQUAL_2005_5022.ZIP has been removed before you are able to access it, please contact Don Macpherson or Chris Olmedo as noted below.

2. Extract the data from PROQUAL_2005_5022.ZIP to a temporary directory.
3. Run SETUP.EXE from the temporary directory and follow the directions of the installation program.

When the installation is complete, ProQual 2005 may be launched from [Start | Programs | ProQual 2005](#) or the shortcut on the desktop.

Documentation (ProQual Overview, Utilities and User Guide Documentation) in both WORD and PDF formats is included in the installation package and can be found under the PROQUAL 2005/SUPPORT directory.



MEMORANDUM



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If there are any questions regarding the installation and operation of [ProQual 2005](#) Version 5.0.2.2 please contact either Don Macpherson (dmacpherson@stantec.com / 519-585-7485) or Chris Olmedo (colmedo@stantec.com / 519-585-7493).

Frank Meyer

Frank Meyer, Ph. D.

LTPP-NARO Project Manager

Copies: Larry Wiser, Jack Springer, Gonzalo Rada, Kevin Senn, Mark Gardner,
Brandt Henderson, Don Macpherson, Chris Olmedo



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To: Robin Belt, Tyler Morrison, Suresh Venukanthan, Rohan Perera

From: Chris Olmedo

Date: May 9, 2005

Reference: ProQual 2005 Version 5.0 Upgrade Comments

FILE: 1621-50055-177

This memo provides comments regarding changes that have to be made when going from ProQual 2004 to ProQual 2005.

Equipment:

- Dipstick serial numbers will have to be entered in the Equipment table in ProQual 2005. They must be in the same order in which they were entered in ProQual 2004.
- The default horizontal and vertical Photocell offsets for the ICC profilers were current as of February 2005.

Archiving:

The archiving feature added in ProQual 2005 requires the specification of a root directory for the generation of archives (the default is "C:\Archive"). This may be changed via the System | Setup | Miscellaneous tab.

Site Data:

ProQual 2004 and ProQual 2005 databases are not compatible. One cannot directly use any databases created in ProQual 2004 (or ProQual 2002) with this version (if you try, they will be overwritten). This includes any manual data that has been entered or loaded. Datasets from the older databases may be added to a new ProQual 2005 database using the System | Copy function or by importing the appropriate dataset(s) from the IMS.

Manual Longitudinal Profile Reprocessing:

ProQual 2005 uses unfiltered longitudinal Dipstick profile data for analysis and to create IMS upload files. Prior versions of ProQual used filtered profile data (Surface Dynamics filter). All manual longitudinal profile data collected to date must, therefore, be reprocessed.

Chris Olmedo

Chris Olmedo

LTPP-NARO Data Analyst – Profile, SMP, AWS

Copies: Larry Wiser, Jack Springer, Gonzalo Rada, Kevin Senn, Mark Gardner,
Brandt Henderson, Don Macpherson, Frank Meyer

ProQual 2005 Enhancements

Several problems and areas of concern were identified with **ProQual 2004**. The following table summarizes and prioritizes these areas of concern. Items with **shaded** numbers have been partially or completely resolved in **ProQual 2005**:

#	Problems, Modifications and Enhancements	Priority
1	PROFPR S-63 / SPR 3-852: IMS upload files contain the value "NULL" for WAVE_LENGTH_INIT.	High
2	TSSC-71: Ensure that the pavement temperature is NULL when generating IMS upload files for longitudinal manual (Dipstick) profiles pending decision on adding air temperature.	High
3	During SPS subsectioning, a subsection dataset may be overwritten / merged if a subsection already has a dataset ID the same as the "base" SPS subsection (e.g. if an SPS child subsection was downloaded from the IMS but not the corresponding base subsection)	High
4	Incorporate current ICC photocell offsets as defaults in Equipment table.	High
5	ICC DLL Related Issues <ul style="list-style-type: none"> Changes to the filtering algorithm for manual Dipstick data. There is a limit on the length of the path names that the ICC DLL will handle. ProQual can handle path names up to 255 characters. 	
6	Subsection information for a site is deleted (SSection.db) when <u>any</u> dataset for the site is deleted.	High
7	Changing the date of a Manual dataset (longitudinal or transverse) is not consistent or reliable.	High
8	PROFPR W-17: Add Model 2200 Dipstick entries to the Equipment table.	High
9	Printed spike report is missing information when there is a single spike location. The information is shown in the print preview.	High
10	Dipstick data related issues <ul style="list-style-type: none"> Calculate IRI for longitudinal dipstick profiles using unfiltered data. Generate upload files for longitudinal dipstick profiles using unfiltered data. Display longitudinal dipstick profiles in Profiles Data using filtered data. 	High
11	Add equipment offsets and subsectioning limits to DataSets table and 'P' file name to Header table for future use by ProXport	High
12	Incorporate automated archiving capability to generate an archive structure compatible with Directive GO-31. ERD file generation is handled externally by ProXport	High

ProQual 2005 Enhancements